

## Book Review

*The Yponomeutinae (Lepidoptera) of the World exclusive of the Americas.*  
Zlata S. Gershenson and Sandrine A. Ulenberg. 1998. i-x. 202 pp. North-Holland,  
Amsterdam/Oxford. Price: A\$100. (Koninklijke Nederlandse Akademie van  
Wetenschappen Verhandelingen Afdeling Naturkunde, Tweede Reeks, Deel 99).

This book provides an overview of the species of moths of the subfamily Yponomeutinae, other than those occurring in the Americas. It is based on study of descriptions, type material and other material in major collections supplemented by that in some smaller collections. As a result 231 species, grouped in 25 genera, are considered to be appropriately included in the subfamily from areas other than the Americas. There is a brief abstract and acknowledgements of help followed by an introduction and a section listing the sources of material used in the study.

To provide the background leading to the present state of knowledge of the species currently considered to be includable in the Yponomeutinae, the "Historical review" of the study of the "small ermine moths" starts with reference to the early work of Réaumur (1738), provides an outline of subsequent work on Yponomeutoidea in general and ends with reference to recent studies in New Zealand by Dugdale.

The basic information on the morphology of adults required as an introduction to initial taxonomic investigation is provided in a short, illustrated account. Similar information for immature stages, which are, as in the case with so many groups of insects, less well studied than the adults, is given in more abbreviated form but a useful entry to the relevant literature is given through appropriate references.

There is a substantial list, in tabular form, of host plants on which larvae are known to develop, which include members of more than twenty families, mostly of dicotyledonous angiosperms. The list is somewhat ambiguously stated not to include "introduced plant species" or "cultivars".

A synopsis of the distribution of the genera through zoogeographic regions, in areas other than the Americas, is also given in tabular form.

A section on the classification of the subfamily includes a brief statement that the authors agree with the conclusion that the subfamily is a monophyletic assemblage (placed at various taxonomic levels by earlier authors) having as its sister group the subfamily Saridoscelinae. A commitment is given by the authors to pursue the matter of the relationships of the genera within the Yponomeutinae and the position of the subfamily within the family in future publications. It might have been preferable to include their findings in the present book rather than delay publication to some future unspecified work. The subfamily is briefly defined and there is a list of non-American genera and species. There is also a list of those genera listed as Yponomeutids by Nye and Fletcher, in their 1991 "Generic names of Moths of the World", which the authors consider not to be Yponomeutines. A note beside each name in the list gives the reason for its exclusion. Two keys to the non-American genera are provided, one based on external features and another on male genitalia.

A list of references concludes the general part of the work which occupies almost a third of the book.

The remainder of the work (from page 59 onwards) is devoted to a more detailed treatment of the non-American Yponomeutines at generic and specific level. These are dealt with genus by genus, in alphabetical order, with species being treated alphabetically within each genus. There is a reference to the original description of each genus and the type species is given. Under each species there is a reference to the original description

and information on synonyms, the location of the type material, distribution of the species, months in which adult flight has been observed and on host plants. Synonymic information could have been arranged in a way which would be easier to use. There are illustrations of more than 20 species of which genitalia have not previously been illustrated in the literature. There are three keys to the species of the large genus *Yponomeuta*, one based on external characters, one based on male genitalia and another on female genitalia. All three keys, unfortunately, exclude a number of species. This limits their usefulness to the uninitiated. Keys are lacking altogether for other genera, even the larger genera, such as *Zelleria* and *Kessleria*, for which they would be most useful. In addition to line drawings scattered through the text there are three coloured plates depicting more than 60 set specimens and six black and white plates of photographic illustrations of genitalia preparations.

The book itself is hard covered and well bound and has a simple, pleasantly coloured cover based on the three coloured plates of set specimens.

So much for the dry bones of the book. A reader of a review has, however, some right to expect an answer to the question, "Should I bother to have a closer look at the book to see if it will be of use to me"? The writer of a review has some obligation to attempt to provide an opinion on the position which the work holds in the literature. He can also be expected to suggest the value of the work to the various kinds of readers who might have an interest in it, even if, like me, he cannot claim to have been at any time seriously steeped in the study of the Yponomeutinae. On the other hand, perhaps this makes it easier for me to give advice from the point of view of a potentially interested person rather than someone who is already a fanatical enthusiast of the group. For the latter the book provides a useful synopsis of the present state of opinion and knowledge of the non-American species, and all specialists will no doubt already have a copy on hand. An experienced specialist would already be familiar with the literature and the inadequacy of those keys which are provided will not be too much of a hindrance, although even the specialist would undoubtedly appreciate a more complete coverage of the species. Looking at the work from the point of view of a potentially interested newcomer to the group or even someone who has some thoughts of looking at one of the groups of smaller moths for the first time, the book would certainly be useful as an introduction. The historical section gives a clear background to tracing the development of the study of the group and of the intricacies of opinions and their changes. The fact that the classification of the Yponomeutidae has, like so many insect families, been through a long series of changes, in whole or in part, and is still not stable shows that there is still much to be done and problems to be solved. This is confirmed by the fact that the authors of the book have decided to remove a great many genera from the subfamily Yponomeutinae in their reassessment of its constitution. This has implications in relation to the Australian fauna. Several of the genera included by Ted Edwards in his contribution to the "Checklist of the Lepidoptera of Australia" as Yponomeutines are on the "excluded" list and there are also a few differences at species level. Clearly, as pointed out in the "Catalogue" by Edwards, this group is in need of further study and revision in Australia. Work here promises the reward of interesting discoveries for the enterprising entomologist.

The morphological section gives enough information and guidance on what to look for in preliminary work and the systematic sections give enough information and guidance through the literature to enable anyone other than the complete novice to make early progress in his studies. Even so, perseverance and a little help from an experienced lepidopterist would soon overcome any "teething" problems. From then on the delight of working with such beautiful, if small, insects would surely provide the impetus for long term interest — even if society might not be forward-thinking enough to pay for benefits of the work!

Taken in the wider context, the increasing demands for taxonomic work, especially

on relatively poorly studied faunas of large land masses, such as Australia, Africa or Asia, make it important that those able to do so should provide works which will enable enthusiastic newcomers to become familiar with the fauna quickly and enable them to make contributions to knowledge themselves as soon as possible. This treatment of the Yponomeutinae is an example of just such a work. It is an example of the kind of publication which could well be produced for many other groups in our fauna.

Here, in Gershenson and Ulenberg's book, is a neat introduction to the Yponomeutinae. Is there anyone prepared to take a ride on its back into the fascinating unknowns of the microlepidoptera? You could do worse!

Before I forget — I must, because most reviewers seem to do it, point out that there is a least one spelling mistake. I doubt that this is as important as the many words which are correctly spelt!

*Courtenay Smithers,  
Australian Museum,  
Sydney.*